

What is claimed is:

1. A heater comprising,
a glow plug or flame monitor in which, during a glow plug ramp time interval, the amount of energy supplied per unit of time is successively changeable, and
a control unit which is operationally coupled to the glow plug or flame monitor,
wherein the control unit is operative for determining a resistance value of the glow plug or flame monitor during the glow plug ramp time interval, for comparing the resistance value determined to a threshold value R_{GS} , and for generating a flame-out signal when the threshold value R_{GS} is not reached during the glow plug ramp time interval.
2. The heater as claimed in claim 1, wherein the threshold value R_{GS} changed in accordance with a function $R_{GS} = f(t)$ in dependence on a time t during the glow plug ramp time interval.
3. The heater as claimed in claim 2, wherein the function is determined depending on a resistance value R_{start} of the glow plug or flame monitor at the start of the glow plug ramp time interval.
4. The heater as claimed in claim 2, wherein the function is determined by a characteristic of the resistance value that is linear between a resistance value R_{start} of the glow plug or flame monitor at the start of the glow plug ramp time interval and a resistance value R_{end} of the glow plug or flame monitor at the end of the glow plug ramp time interval where $R_{GS} = f(t; R_{start}; R_{end})$.
5. The heater as claimed in claim 4, wherein the function is further determined by an offset to provide the characteristic.
6. The heater as claimed in claim 5, wherein the offset is a function offset Y such that the function is determined as $R_{GS} = f(t; R_{start}; R_{end}) - Y$.

7. The heater as claimed in claim 5, wherein the offset is one of offset values A and B, each being function-determining resistance values such that the function is determined as $R_{GS} = t * (A * R_{start} - B * R_{end})$.

8. The heater as claimed in claim 4, wherein the resistance value R_{end} of the glow plug is either experimentally determined at the end in the glow plug ramp time interval or is determined as a function of the resistance value R_{start} of the glow plug at the start of the ramp time interval such that $R_{end} = f(R_{start})$.

9. The heater as claimed in claim 7, wherein the function is determined as $R_{GS} = f(t; A * R_{start}; B * R_{end})$, with $R_{end} = f(R_{start})$.

10. The heater as claimed in claim 2, wherein the function is determined by a characteristic of the resistance value that is linear between the resistance value R_{start} of the glow plug or flame monitor at the start of the glow plug ramp time interval and the resistance value R_{end} of the glow plug or flame monitor at the end of the glow plug ramp time interval where $R_{GS} = t * (R_{start} - R_{end})/t_{total}$.

11. The heater as claimed in claim 10, wherein the function is further determined by an offset to provide the characteristic.

12. The heater as claimed in claim 11, wherein the offset is a function offset Y such that the function is determined as $R_{GS} = t * (R_{start} - R_{end})/t_{total} - Y$.

13. The heater as claimed in claim 4, wherein the resistance value R_{end} of the glow plug is determined as a function of the resistance value R_{start} of the glow plug at the start of the ramp time interval such that $R_{end} = X * R_{start}$ where X is a numerical value.

14. The heater as claimed in claim 7, wherein the function is determined as $R_{GS} = t * (A * R_{start} - B * X * R_{end})/t_{total}$, with $R_{end} = f(R_{start})$.

15. A motor vehicle including a heater, the heater comprising,
a glow plug or flame monitor in which, during a glow plug ramp time interval, the amount of energy supplied per unit of time is successively changeable, and

a control unit which is operationally coupled to the glow plug or flame monitor, wherein the control unit is operative for determining a resistance value of the glow plug or flame monitor during the glow plug ramp time interval, for comparing the resistance value determined to a threshold value R_{GS} , and for generating a flame-out signal when the threshold value R_{GS} is not reached during the glow plug ramp time interval.

16. A motor vehicle including the heater set forth in claim 15, wherein the threshold value R_{GS} changed in accordance with a function $R_{GS} = f(t)$ in dependence on a time t during the glow plug ramp time interval.

17. A motor vehicle including the heater set forth in claim 16, wherein the function is determined by a characteristic of the resistance value that is linear between a resistance value R_{start} of the glow plug or flame monitor at the start of the glow plug ramp time interval and a resistance value R_{end} of the glow plug or flame monitor at the end of the glow plug ramp time interval where $R_{GS} = f(t; R_{start}; R_{end})$.

18. A motor vehicle including the heater set forth in claim 17, wherein the function is further determined by a function offset Y such that the function is determined as $R_{GS} = f(t; R_{start}; R_{end}) - Y$.

19. A motor vehicle including the heater set forth in claim 18, wherein the resistance value R_{end} of the glow plug is either experimentally determined at the end in the glow plug ramp time interval or is determined as a function of the resistance value R_{start} of the glow plug at the start of the ramp time interval such that $R_{end} = f(R_{start})$.